Appendix H
Air Quality Conformity Determination

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Subsequent to issuance of the Revised DEIS, the proposed SR 509: Corridor Completion/I-5/South Access Road Project preferred alternative was analyzed to determine localized (hot-spot) and regional conformity to the Puget Sound Region's air quality maintenance plans pursuant to the requirements of 40 CFR Part 93 and WAC 173-420. The conformity analysis was completed using the latest regional planning assumptions, including emission factors and an analysis year consistent with those used in PSRC's Metropolitan Transportation Plan (MTP) adopted in 2001 (*Destination 2030*) and its subsequent revisions. FHWA policy is that project conformity must be demonstrated prior to issuance of the record of decision for a project for which FHWA is lead agency.

Project-Level Conformity Analysis

Project-level conformity is required for projects in CO maintenance areas. Conformity is demonstrated by showing that a proposed project would not cause or contribute to any exceedance of the NAAQS for the duration of the planning horizon. To demonstrate localized conformity for the proposed SR 509: Corridor Completion/I-5/South Access Road Project preferred alternative, the 10 ramp terminal intersections that would either be newly constructed or have their channelization modified as part of the SR 509 project were modeled using Cal3QHC and the latest Mobile5b model outputs obtained from PSRC. Projected traffic volumes, intersection operations data, and emission factors for 2030 were used. The year after project opening when transportation pollutant emissions most likely would exceed the region's emission budgets based on PSRC modeling trends is 2030. Regional CO emissions were incorporated by including a background CO concentration of 3 ppm averaged over 1 hour. Mainline emissions from SR 509, the South Access Road, and I-5 were also included in the model.

The preferred alternative was modeled to result in maximum 1-hour average CO concentrations ranging between 5.0 and 10.2 ppm and maximum 8-hour average concentrations ranging between 3.5 and 7.1 ppm in 2030 (Table 1). The modeled concentrations were less than the 1-hour and 8-hour NAAQS of 35 and 9 ppm, respectively, at all locations. Based on these results, the proposed project is not expected to cause any new or contribute to any existing localized violations of the NAAQS for CO.

Table 1 Maximum Modeled CO Concentrations for the Preferred Alternative in 2030		
Location	**Maximum 1-hour Average Concentration (ppm)**	**Maximum 8-hour Average Concentration (ppm)**
SR 509 and South 188th Street/12th Place new Single Point Urban Intersection	6.3	4.4
SR 509 and South 200th Street	6.2	4.3
South Access Road Southbound and South 200th Street	5.4	3.8
South Access Road Northbound and South 200th Street	5.0	3.5
South Access Road /SR 509 Southbound and 28th Ave South	10.2	7.1
South Access Road /SR 509 Northbound and 28th Ave South	8.7	6.1
I-5 Southbound Frontage Road and South 228th Street	8.8	6.2
I-5 Northbound Frontage Road and South 228th Street	7.4	5.2
I-5 Southbound Frontage Road and SR 516	8.2	5.7
I-5 Northbound Frontage Road and SR 516	9.3	6.5

Note: The 1-hour NAAQS for CO is 35 ppm and the 8-hour NAAQS is 9 ppm.

Regional Conformity Analysis

On June 27, 2002, the PSRC Executive Board approved refinement of the MTP to reflect the design of the preferred alternative for the proposed project. The revised modeling runs show regional emissions below the emission budgets for all pollutants in 2020 and 2030 for the MTP, including the preferred alternative. PSRC's modeling demonstrates that air quality in the Puget Sound region, including implementation of the preferred alternative, would conform at the regional level to the regional air quality maintenance plans. The preferred alternative would not cause any new or contribute to any existing regional exceedances of the NAAQS.

Conformity Determination

FHWA and WSDOT projects must comply with project-level conformity criteria of the EPA Conformity Rule, and with WAC Chapter 173-420. The project must be included in a conforming plan (the MTP and the TIP) by the regional metropolitan planning organization (MPO). The proposed project is included as project WDOUM-6 in the Regional TIP and MTP as revised on

June 27, 2002. Per 40 CFR Part 93, the following criteria must be met when determining project conformity.

- The conformity determination must be based on the latest planning assumptions. The project-level hot-spot conformity analysis was completed using the Puget Sound Region MOBILE5b emission files used by PSRC for the *Destination 2030* MTP and TIP conformity determination. The SR 509: Corridor Completion/I-5/South Access Road Project is included in PSRC's current MTP and Regional TIP.
- The conformity determination must be based on the latest emissions estimation model available. Emissions to determine conformity to the MTP and TIP for the proposed SR 509: Corridor Completion/I-5/South Access Road Project were calculated using MOBILE5b, the emission model used to model conformity to the current Puget Sound Air Quality Maintenance Plans.
- The MPO must make the conformity determination according to the consultation procedures of this rule and the implementation plan revision required by Section 51.396. PSRC's MTP and TIP have been determined to conform to the SIP and have been accepted by EPA for the proposed project. The refinement of the MTP and TIP adopted on March 22, 2002, includes the full configuration of the preferred alternative.
- There must be a current conforming plan and a current conforming TIP at the time of project approval. The proposed project is included in PSRC's current MTP and Regional TIP.
- The project must come from a conforming transportation plan and program. The proposed SR 509: Corridor Completion/I-5/South Access Road Project is included in PSRC's MTP and TIP.
- The FHWA project must not cause or contribute to any new localized CO or PM_{10} violation in CO and PM_{10} nonattainment or maintenance areas. The proposed SR 509: Corridor Completion/I-5/South Access Road Project is located in a CO maintenance area. The proposed project would not create any new regional violations or contribute to the frequency or severity of any existing violations of the NAAQS for CO. The project area is not within a PM_{10} nonattainment or maintenance area.
- The FHWA project must comply with PM_{10} control measures in the applicable implementation plan. The project area is not within a nonattainment or maintenance area for PM_{10}.

The proposed project is included in PSRC's current MTP and Regional TIP. The project meets all requirements of 40 CFR Part 93 and WAC 173-420, and conforms to the Puget Sound Air Quality Maintenance Plans.

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